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ABSTRACT

This report describes the School, College, and University Partnership Program (SCUP) at Northern Arizona University (NAU). Supported by grants from the U.S. Department of Education, this program established partnerships among NAU, Northern Arizona School Board Association, seven Arizona secondary schools, and the Navajo Nation and the Hopi Tribe. This year-round program, which included an academic and a summer component, tried to meet the needs of educationally disadvantaged students from low-income families living on or near the Hopi and Navajo reservations. There were a total of 9,635 students assisted during the grant period, with the majority being Native American participants. A total of $696,049 in federal funds were authorized for the program during the 3-year grant period. The first phase of the program provided educational services to students in grades 7-12 at the participating target schools. Educational services included drop-out prevention programs, career and personal development programs, and computer literacy programs. The program also included teacher training and parent education classes. The second phase of the program consisted of Nizhoni Academy, a 5-week academic program conducted on the campus of NAU. This program introduced high school students to the rigors of university life while improving specific skills identified as conducive to success in college. Evaluation results indicate that the program was successful in meeting the needs of educationally disadvantaged students living on or near the Hopi and Navajo reservations. (LP)

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SCHOOL, COLLEGE AND UNIVERSITY PARTNERSHIP PROGRAM - (SCUP)

FINAL REPORT OF THE SCHOOL, COLLEGE & UNIVERSITY PARTNERSHIP PROGRAM - SCUP 1988 - 1991

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Section II - Information on Project Participants

A. Number of Students Assisted

A1. Total number of students assisted during grant period 9,635. (Provide an unduplicated number for the total grant period.)

A2. Number of students assisted during the school year and summer programs

	Number of Participants		
	Year 1	Year 2	Year 3
School Year	3,036	2,992	3,103
Summer	170	169	165
Total	3,206	3,161	3,268

(Note: Total should be an unduplicated number; thus it may not be the sum of the school year and summer programs. Please refer to the instructions for Section II.)

B. Participant Distribution by Ethnic Background

	Number of Participants		
	Year 1	Year 2	Year 3
1. American Indian/Alaskan Native	2,937	2,862	2,981
2. Asian/Pacific Islanders	-	-	-
3. Black (Other than Hispanic)	18	27	28
4. Hispanic	179	201	202
5. White (Other than Hispanic)	72	71	57
6. Total (Sum of lines 1 through 5 must agree with total in A2)	3,206	3,161	3,268

C. Participant Distribution by Gender

	Number of Participants		
	Year 1	Year 2	Year 3
1. Male	1,490	1,489	1,733
2. Female	1,716	1,672	1,535
3. Total (Sum of lines 1 and 2 must agree with total in A2)	3,206	3,161	3,268

D. Participant Distribution by Grade Level

	Number of Participants		
	Year 1	Year 2	Year 3
1. Grade 7	200	202	209
2. Grade 8	211	185	208
3. Grade 9	890	863	898
4. Grade 10	758	761	769
5. Grade 11	646	648	634
6. Grade 12	501	502	550
7. Other, specify _____			
8. Total (Sum of lines 1 through 7 must agree with total in A2)	3,206	3,161	3,268

E. Student Types

	Number of Participants		
	Year 1	Year 2	Year 3
1. Low-income	3,206	3,161	3,268
2. Educationally disadvantaged	3,206	3,161	3,268
3. Potential dropouts			
4. Pregnant adolescents			
5. Teen parents			
6. Children of migratory agricultural workers			
7. Children of migratory fishermen			
8. Other, specify _____			

Comments: Section E StudentTypes - This project was conducted on the Navajo and Hopi reservations where poverity is high, and the average home income is approximately 8,000 dollars per family.

Section III - Project Focus/Activities
(check all that apply)

✓ Dropout prevention
✓ Improve basic academic skills
✓ Increase understanding of specific subjects, specify subjects _____
✓ Increase the opportunity to pursue postsecondary education
✓ Improve employment prospects after secondary school
✓ Use college students to tutor secondary school students
___ Other, specify _____

Section IV - Composition of the Partnership
(check all that apply)

✓ Local Educational Agency(ies)
___ 2 Year Public Institution(s) of Higher Education
___ 2 Year Private Institution(s) of Higher Education
✓ 4 Year Public Institution(s) of Higher Education
___ 4 Year Private Institution(s) of Higher Education
___ Business(es), specify type(s) _____
___ Labor Organization(s)
___ Professional Association(s)
___ Community-based Organization(s)
___ Other Public Agencies, or Associations, specify type(s) _____
✓ Other Private Agencies, or Associations, specify type(s) Native American Tribes: The Navajo Nation, and The Hopi Tribe

List the Partners

Northern Arizona University
Northern Arizona School Board Association
The Navajo Nation
The Hopi Tribe
U.S. Department of Education, Washington, D.C.

SCHOOL, COLLEGE AND UNIVERSITY PARTNERSHIPS (SCUP) PROGRAM - 1988-1991

Northern Arizona University
Flagstaff, Arizona 86011
Project Director: Dr. W. Sakiestewa Gilbert
Northern Arizona University

PROJECT PURPOSE

The purpose of this program was to provide services to those educationally disadvantage students who come from low socioeconomic families, attending rural schools on or near the Navajo and Hopi reservations, and to provide services in the areas of drop-out prevention, career/personal development, computer assisted instructional laboratories, and a academic summer program, "Nizhoni Academy".

BACKGROUND

Northern Arizona University/the Center for Excellence in Education (NAU/CEE), submitted a proposal seeking from the U.S. Department of Education federal funding that would allow for the implementation of a three year program called "School, College and University Partnerships" program. A total of $696,049 in Federal funds were authorized during the three year period that began on November 1, 1988 and ended on October 31, 1991. The breakdown by school years is a follows:

1988 - 1989	$250,000
1989 - 1990	$221,000
1990 - 1991	$225,049

The project has been able to consolidate the greatest resources (professional staff and facilities) of the seven target public schools located on or near the Navajo and Hopi Indian reservations. It was the intent of Northern Arizona University to

effectively facilitate both curricular change and supplementary academic experiences for all educationally disadvantage students in the participating secondary schools.

The project has shown that a cooperative effort between an Institution of Higher Education (IHE) and Local Education Agency (LEA) is of greatest significance because it allows the former to strive for the solution of many practical education problems that may otherwise be ignored. Forming partnerships with the Navajo Nation, the Hopi Tribe and the Northern Arizona School Board Association has demonstrated a working relationship and has exceeded the requirements for the partnership requirements.

Prior to this program, educational resources were very limited to those participating secondary schools. Computer labs were only established at one school site (Chinle H.S.), and the other six schools did not have in existence a computer lab, and educational software. Although school counselors were employed by all schools, we found that the number of counselors per student (1/500) was the norm, and was inadequate to effectively serve these students. Career exploration/fairs were very limited, and in some cases, did not exist. The drop-out prevention component was highly recognized by all schools as being a valuable component of the schools curriculum, however, the majority of the schools did not provide a drop-out prevention program either because of the high cost to run such a program, or the lack of trained/certified school personnel. Parent involvement activities in one of the schools had been implemented, however, the remaining six schcols did not have a parent involvement program. There were was not person within the school that had the responsibility of coordinating a parent program, but the schools did indicate that there was a great need for such a program within the school/community.

In our discussion with school principals, we found that besides providing educational services during the regular school year, there was also a need for summer program(s) that would be available for their students who were highly motivated and serious about attending college after graduation from high school. All of

our school sites are located in rural communities (on or near Indian reservations) in which the majority of school children rely of the school bus for transportation to and from home. Only two of our schools (Chinle and Hopi High School) were either visited by an institution of higher education or provided information regarding academic summer programs that were available to their students.

A verbal assessment was conducted by each site coordinator regarding the need for study skills program for their students. The question that was asked of all participating teachers: "What do you feel is the most important skill needed of your students that would help them in their academic study"? All teachers felt that there was a great need for a program that would help students study for exams, take notes, organize their time a little better, and how to take exams. This lead us to the program called "Study Skills" which was implemented at all of our school sites.

Before the proposal was submitted, the project director and representatives of Northern Arizona University meet with the Navajo Nation and the Hopi Tribes Department of Educations' director and staff. The purpose was to assess the needs of the students attending schools on or near their reservations, and to see how this project could better serve these students with academic support. The Navajo Nation indicated that their children (Navajo) had the highest drop-out rate among all ethnic groups, lacked role models, lacked the necessary programs needed to address these educational issues, lacked the skill development and knowledge in technology (computers), had the lowest achievement scores in the nation, and had the lowest ACT/SAT scores of all ethnic groups (below national norms). In collaboration with the Navajo Nation, the six participating secondary schools were identified by the Navajo Nation as being the most in need by this program. In addition, a meeting was also held with the Hopi tribe, and they also expressed concerns in regard to low test scores, lack of role models, lack of educational support, and the need for such a program.

A Need for Partnerships

Educationally disadvantaged students must be provided with the opportunity to realistically direct their career goals toward higher education. For students from low-income communities, where many are the first in their families to attend college, consistent reinforcement and encouragements beginning in elementary school, emphasized heavily during the junior high school and high school years, and continuing throughout their post-secondary education, is a critical factor in maintaining interest in academic achievement.

Educational partnerships between secondary schools, (especially those in rural communities), and post-secondary institutions such as Northern Arizona University, form a critical means of offering direction, encouragement, and opportunities for students to experience academic success. It is the intent of this project to address such issues through the forming of partnerships between the seven target secondary schools, the Navajo Nation, the Hopi Tribe, the Northern Arizona School Board Association, the Department of Education, Washington, D.C., and Northern Arizona University/the Center for Excellence in Education.

NAU has numerous resources such as an Educational Talent Search Program, the STAR transition program for bridging high school and college, and a Student Support Services Program for university students that can work with the partnerships explicit in this grant to form the continuum of support needed for educationally disadvantaged students in the SCUP program. Combining NAU's academic support programs with the Navajo Nation, and the Hopi tribe and other tribal agencies and the families of those students participating in this program, provided an ideal model for promoting continued education success for everyone involved.

Program Personnel

The key project personnel included a number of personnel who were all involved in the project. They included the Director of the Program, an assistant director, four program coordinators (2 full time, and 2 part time), (97) secondary teachers, program secretary, senior program evaluator, an assistant program evaluator. In addition, school superintendents, principals, and secondary school counselors and school staff personnel were all involved in the program from the seven participating school sites. A five member Board of Directors for the program were also involved in the program which represented NAU, the Navajo Nation, the Hopi Tribe, and the Northern Arizona School Board Association.

The hiring of staff personnel was handled through the normal process of hiring as set forth by the department of Human Resources Office, and the Affirmative Action office on the campus of Northern Arizona University.

The selection of participating secondary teachers who participated in the project was conducted by the site coordinators in collaboration with the school principals, and director of the project. The selection process was fairly easy, however, maintaining the original teachers from year to year was the most difficult encounter. As expected for rural schools, this program experienced a moderate turnover of staff and teachers from the seven target schools. This effected the continuity of teachers as we were trying to establish at the beginning of the project. After the first year of the project, the continuity of teachers started to maintain its presence. Once we were able to establish this continuity, all other activities associated with each school was more on level ground. Again, as expected, the turnover of administrators (principals) at our target schools was more than we really expected. At one school, we started the project with one principal, and ended with the fourth principal within a three year period. It would appear that this would effect the flow of the program at this particular school, but the site coordinator did a superior job in keeping our principal abreast of the program.

Below (Table 1), you will find a list of all key program staff who were involved in the project:

Table 1. School, College & University Partnerships Program (SCUP) - Key Program Staff

NAME/POSITION	DEGREE	EMPLOYMENT STATUS
DR. Willard Gilbert Project Director	Ed.D.	1/2 Time
David Basham Assistant Director	M.Ed.	1/2 Time
Ray Rodriguez Director, Student Support	M.A.	1/2 Time
Connie Wauneka Asst. Dir. Stu. Sup.	M.A.	1/2 Time
Ward Tsingine Program Coordinator	M.A.	Full Time
Phyllis Norton Program Coordinator	B.A.	Full Time
Maggie Murphy Secretary II	B.A.	1/2 Time
DR. Ernesto Bernal Program Evaluator	Ph.D.	1/4 Time
Caixan Fan Asst. Program Evaluator	M.A.	1/2 Time

Equipment and Materials

The purchase of equipment with Federal monies and matching funds for the participating schools, served two major purposes: 1) for documenting of teacher training purposes, and 2) for classroom use in the Computer Assisted Instructional Laboratories to support teachers efforts, and student academic performance. The following computer equipment was purchased for the three schools who implemented the CAIL program:

The computer equipment at each of the three labs were used every day for five days a week from the beginning of the school day to the end of the day. The labs were utilized by students, teachers, and the administration. The school principle for each of the three schools were very cooperative in the up-keep of the equipment and assisting program coordinators and school teachers in scheduling visitations to the school sites, and the

coordination of teacher inservice sessions on site. The principals were also responsible for the security of the labs.

The inventory of the computer equipment was conducted by NAU's Property Control Office in which each hardware item was inventoried, and given a property number before the equipment was distributed to each school site. Once the equipment arrived, the program coordinators were responsible for making certain that all equipment was in working order, and they provided for proper installation by Apple company. Once the labs were installed, Apple company provided a two hour inservice to our participating teachers on the use of computers for each lab.

PROJECT DESCRIPTION

The objectives of the School, College & University Partnership (SCUP) program was to establish a year round program which included an "academic" and a "summer" component program that would foster the needs of those educationally disadvantaged students coming from low income families in the areas of computer literacy, career awareness and dropout prevention programs. The first phase of the program consisted of the "Academic Year" program in which educational services were provided on site to students (7th-12th) at the seven participating secondary target schools (See table 2.). The second phase of the program consisted of the "Nizhoni Academy" a five week academic program conducted on the campus of NAU. The academic component has been arranged to meet the four objectives in the following manner.

Table 2

Listing of the Seven Participating Secondary Target Schools

Name of School	Location
Chinle High School	Arizona
Cuba High School	New Mexico
Hopi High School	Arizona
Magdalena High School	New Mexico
Navajo Pine High School	Arizona
Red Mesa High School	Arizona
Tohatchi High School	New Mexico

Objective 1. Dropout Prevention Program. The purpose of the drop-out prevention program was to provide study skills, workshops/seminars for participating teachers and students, and a parental involvement program for each of the seven target secondary schools.

The study skills component included test-taking skills, note-taking skills, time management skills, library and research skills, goal setting skills, preparation and fees for the American College Test/Scholastic Aptitude Test (ACT/SAT).

The implementation of the study skills component was conducted through the integration model by the teachers in teaching of their content areas at five of the schools. For the Hopi and Navajo Pine High Schools study skills program all seventh and eighth graders in the two schools were required to take the "Study Skills" course for a period of nine weeks during the school year. One teacher was designated as the teacher for each school in which the hm study skills curriculum was adopted from National Association of Secondary School Principals (NASSP), and note books and study skills (Level I&II) were provided for the students.

This program was conducted by the use of the "Trainer of Trainers" approach in which one of the projects participating teachers received extensive training by attending a "hm Study Skills Seminar" sponsored by the NASSP. Upon completion of the seminar, Ms. Pauline Watchman was then prepared to conduct hm Study Skills seminars for all of the participating teachers. The curriculum included the implementation of Level I & II of the hm Study Skills program. The content of Level I included the development of listening skills, reading for meaning, note taking skills, organization of time and notes, the use of dictionary, and test taking skills. Level II included learning how to listen, vocabulary development, note taking skills, problem solving, developing good study habits, improving memory, and preparing for objective and essay exams.

Although the study skills curriculum was implemented at all seven schools, the overall evaluation was conducted in the following manner. To analyze the effectiveness of the students'

overall performance in study skills, a dependent t-test, two-tailed was employed. This assessment technique was conducted for students at Hopi, Chinle and Cuba High Schools. A pre-test was administered before the start of the class, and upon completion of the course, a post-test was administered. The test included 16 question items which was designed by the NASSP for its use with the hm Study Skills curriculum. For all participants, moderately significant results were obtained, indicating that the study skills program was successful. The pre-test results indicated a mean score of (8.508), and the post-test indicated a mean score of (8.963). Indicating an improvement in student performance by a difference of (.456). A comparison was made to determine the improvement between genders. The results indicated that both male and female students did slightly better on the study skills post-test, and that the male students had an improvement between the pre and post-test of (.514) as compared to the female students at (.389). Hopi high school showed the most significant results of all the schools ($p=.022$). A two-way interaction (gender*grade, gender*school, school*grade) was examined to test if the treatment was significantly influenced by certain types of combinations of the three independent variables. The results indicated that statistical significance was found to exist for the interaction between gender and school ($f(1,128)=4.74, p<.05$). This indicated that both the male and female students who attend schools regardless of the grade they were in, scored high on the post-test. There was no significance found between (gender*grade) or (school*grade).

The final result of the study skills program based on the training of teachers, implementation of the curriculum, and the research data has indicated that the study skills component was very beneficial to the students, staff and the community (parents). In addition, this component was highly recognized as an important academic skill lacking in all schools among all their students, and was highly regarded as "badly" in need.

The purpose of the Teacher Training component was to provide training in the areas of critical thinking skills development,

cooperative learning technique, and cultural awareness/sensitivity in which teachers of American Indian students will be able to better serve the Indian student. In collaboration with the Center for Critical Thinking and Moral Critique at Sonoma State University, California, this program adopted the model and utilized the handbook "Critical Thinking Handbook: High School" for the training of the teachers. At least one training session was conducted per year for all teachers that would help facilitate and integrate critical thinking skills into their classroom curriculum. In addition to the handbook, a series of video tapes were purchased for use as part of these training sessions. As a result, a curriculum handbook was prepared by the participating teachers that gave examples in how critical thinking skills can be implemented into a lesson plan addressing a specific content area.

In addition, teachers were also given training in the use of the cooperative learning technique in working with Native American students. Again, these workshops were conducted on site by a professional consultant. As a result of these trainings, teachers incorporated this technique into their daily lesson plans in which the students were then able to receive this type of instruction.

In addition to the above, teacher training sessions also included workshops having to do with cultural awareness issues regarding Native American students. Lorene Legah, a member of the Navajo Nation, and an educator provided the cultural awareness training sessions for our teachers teaching on/near the Navajo reservation. They included teachers at Chinle, Red Mesa, Cuba, Tohatchi, Navajo Pine and Magdalena high school. The content of the workshops included an introduction to the Navajo Language, the Navajo kinship system, an overview of the social and cultural teaching of Dine (People), understanding of parents' and child's values, how to utilize the community resources, and information on Navajo cultural resource materials.

The teachers at Hopi high school also received cultural training which was conducted on the campus of NAU. This workshop was conducted by Mr. Ramson Lomatewama, a member of the Hopi tribe, an educator, and an expert of his culture. The content

also included similar topics to that of the Navajo culture, however, in the Hopi culture. The idea of cultural awareness training was an excellent opportunity because it introduced the non-Indian teachers to the Navajo and Hopi culture, and provided valuable information on how they can better teach, enhance their teaching, and have a better understanding of the Native American students. As a result, a teacher and training manuals were developed and distributed to all teachers at each training session.

A study hall component was added in to the third year of the program. The study hall program was implemented at Hopi high school during the Fall, 1990 - Spring, 1991 academic school year. In meeting with the school counselor, and the school principal, there was a strong desire to develop such a program for all of their students grades 7th-12th. This program was implemented at six of the Hopi pueblo villages. It was determined that since all students attending Hopi high school ride the school bus to school, it would be to the advantage of this project that tutoring sessions be held in the villages in which these students reside. Permission was obtained by the community director for each village at no cost to the project. Each village received at least a minimum of 4 hours per week for a period of 32 weeks. The teachers from Hopi high school participated as tutors, providing expertise in each of their content areas. In order that we may evaluate the study hall, this was accomplished in two ways: 1) students who utilized the study hall were required to sign-in on a roster for each visit, and 2) based on this roster, teachers could determine who was utilizing the services, and who weren't. This information gave the teachers a clearer picture of students academic progress in the subject areas. In addition, teachers also required all of there students to attend a study hall for two weeks in a roll before the mid-term and two weeks before the final exams for each semester.

An additional component of the drop prevention program was the "Parent And Student Success" (PASS) program . The purpose of the PASS program was designed to enhance retention by enlisting

parents' support and encouraging awareness of critical issues for the student such as motivation, communication skills, vocational opportunities, and encourage their children to stay in school. Annual parent sessions were available at each participating school site. The goals of the PASS program were:

1) to positively impact the parents of high school aged students of reservation public schools, to assist them to feel powerful and effective with their students concerning their academic performance and success,
2) to facilitate communication between parents and between community members, specifically regarding educational goals and school administration in their community, and
3) to encourage communication between students and their parents regarding academic performance (grades), homework, and school-related attitudes also discipline and family issues.

The manner in which the PASS program was implemented was through each site coordinator who with the assistance of the school counselors, arranged parent workshops for each school during the academic year. Letters were sent home with students, and flyers were distributed throughout the communities. The workshops were held early in the fall semester of each year. For the first year of the program, the program was conducted in conjunction with the Arizona Consortium on Education, utilizing their model called "The Arizona Parents' Academy" conducted by Dr. Steve Brown, State Chairman. This model was adopted by this project and regarded as an excellent model, however, we found that this model had to be adapted to fit the parents in which we were working with. This model is designed for urban parents whose children attend school in the city such as Phoenix, AZ.

A unique situation arouse when this model was implemented on the Navajo and Hopi reservations. English was a second language, and approximately 2/3 of our parents did not speak the English language. Because of this, this project consulted with Ms. Evelyn Begay who is a well known person on the Navajo reservation in conducting parent seminars. She conducted seminars in the Navajo language, and produced handouts written in Navajo. At the conclusion of each seminar, she assisted the Navajo speaking parents complete the evaluation form as part of each seminar.

This project also adapted the Arizona model to fit the needs of the American Indian parents culture. For example: in stressing the importance of education for their children, the "Navajo Philosophy" was presented to the parents which gave them a foundation and a better understanding of how the American educational system is similar with their culture/philosophy.

The manner in which these parent workshop were evaluated was through the process of a questionnaire administered at the conclusion of each workshop. The questionnaire was divided into three sections. The first section addressed 4 questions using a rating scale of 1-5, 1=poor, and 5=excellent. The first part included the quality of information (mean score of 4.22=excellent), quality of speakers (mean score of 3.91 = outstanding), organization (mean score of 4.38 = excellent), and the location & facilities (mean score of 3.87 = outstanding). The second part included suggestions that participants would like to make about the workshop which included the following examples:

1) "Role playing the part of the student because I could exhibit my own children's behaviors and have effective parent's behaviors modeled back to me".
2) "Changing roles [from mother to daughter] gave me a chance to be in my child's shoes for a while".
3) "I liked the whole training".

The third section included general comments to be made in regard to the overall performance of the workshop which included such comments as:

1) "Please bring this to my community".
2) I think we should have group meetings like this at the area chapter houses on the [Indian] reservation".
3) "More homework monitoring strategies".
4) "I suggest that this kind of program come out to our community high school to educate our parents in this type of training. This is very good and I'm sure parents will be interested".

Based on the evaluations received from parents, the concern for such a program from school administers, staff, teachers, and

community members. The PASS program was very successful and highly regarded as the most important component of this program.

Objective 2. Career and Personal Development. This portion of the project addressed the nation-wide school problem of creating realistic awareness on the part of junior and senior high students of the requirements and steps necessary to achieve a variety of career and work environment goals, and to encourage their achievement in career choices. These issues were particularly keenly felt on the Indian reservations, where students may not have an realistic awareness of the means of attaining desirable work in the dominant society. The natural environment of the reservations is a rural, agricultural/farming community, with no "cities" and little employment potential beyond clerking stores and working with tourist-oriented businesses. A two-fold economic need on the reservations today is to attract businesses and employment possibilities to the reservations, as well as readying young adults for the work force yet keeping them engaged with the tribal lifestyle of their families. This project addressed these issues with the following programming:

1) Participation in on-going and developing Career Fairs sponsored by the schools and the tribe that has been the initial level of influence exerted by the project. For each consecutive year, a career fair was held on the campus of Hopi high school which provided <u>all</u> students (7th-12th) with opportunity of exploring possible career choices after graduation from high school. In addition to school participation, NAU also was involved in providing career options through the difference professional departments such as education, nursing, and engineering. Students from Red Mesa high school traveled to the campus of NAU to visit the universities journalism department as a career day sponsored by NAU.

2) The instigation of "Visiting Career Mentors" by bringing those Navajo and Hopi professionals and recognized achievers of some stature back to the reservations to speak to the students, teachers and parents of all schools. For example: for personal development, Miss Navajo Nation Geraldine Gamble and Miss Indian New Mexico Carmelita Leonard conducted seminars that focused on the importance of receiving a good education, learning about ones' native culture and language, and

the importance of staying away from drugs and alcohol substances.

Objective 3. Computer Assisted Instructional Laboratory.

The third component of the academic year program was the Computer Assisted Instructional Laboratory (CAIL) Program. The purpose of the CAIL labs was to train the participating secondary teachers in computer hardware and software in order to assist them in delivering their subject matter effectively. The objectives of the CAIL program were threefold: 1) to introduce basic computing skills to 7th through 12th grade students, 2) to enhance the reading and writing skills of all participating students and 3) to institutionalize CAIL the program by the programs third year.

The implementation of this component was accomplished by training secondary teachers representing subject areas that included mathematics, English composition, drafting, science, and journalism classes. Within the three year period three MacIntosh labs were established at three participating secondary schools, Red Mesa, Hopi and Navajo Pine High Schools. Two computer labs have twenty-one MacIntosh computers, two printers, and an assortment of educational software, and Navajo Pine High School was equip with 12 LC MacIntosh computers/accessories, and lab furniture. During the project, each computer lab was designed to accommodate subject areas that included language arts, English composition, reading, writing, general math, algebra, geometry, science, chemistry, biology, journalism, and mechanical drafting. The labs were designed so that teachers would schedule their classes for the use of the lab as a tool in teaching their content areas. Not only were the labs used by these classes, the labs were also made available to teachers, and all students in the school. The labs were open for use before school, during lunch period(s), and after school.

This also provided an opportunity for the students to learn computing skills and to enhance their academic performance in their subjects through the use of educational software. The computer labs were also instrumental in preparing students for the ACT and the SAT exams.

Currently, all three computer labs for each high school have continued the program as it was originally designed at the beginning of this project. More workshops are now being conducted for teachers, and software continues to be added.

Objective 4. Academic Preparation for the Rigors of Post-Secondary Education. Nizhoni Academy (formerly Nizhoni Camp),a college preparatory summer program, was conducted for the eighth consecutive summer by Northern Arizona University under the auspices of Educational Support Programs. The objective is to introduce and expose high school freshman, sophomores and juniors to the rigorous coursework at the college level, improve basic skills and motivation for learning in their preparation for post-secondary education. Concurrently, the participants have built their self confidence and readiness from a wholesome on-campus learning experience.

Nizhoni Academy is an **intensive**, five-week, summer program designed for students in good academic standing and their high school curriculum must have reflected a college-bound program. During the NIZHONI ACADEMY five week program:

1) Provided 160 hours of instruction in the foundation courses of composition, mathematics and career development, with reading, study skills and computer literacy incorporated into the classes;
2) Improved knowledge and academic skills in the areas of English and mathematics (necessary for a successful college career);
3) Developed study skills including: reading, memory improvement, test-taking, note-taking and time management skills (necessary for college achievement);
4) Provided goal setting, self-esteem building, values clarification, and career development activities;
5) Provided ACT preparation workshops prior to student testing, and;
6) Provided cultural and recreational activities that reflect many facets of university life.

By providing a demanding curricula, the Academy prepared students for continued academic success in high school, as well as instilling future expectations. Through these efforts, the Academy

has provided an experience for a smooth transition from high school to a post-secondary institution.

A key consideration by prospective applicants and their parents is the type of student support services and facilities available. The students resided in Reilly and Sechrist residence halls where they were supervised in small groups by residential counselors. The participants had access to university services, and events, such as the library, natatorium, skydome, gymnasium, student union, computer labs, Learning Assistance Center and theaters.

The Academy was jointly sponsored by NAU, the Navajo Nation (Department of Higher Education), the Hopi Tribe (Department of Education), Johnson-O'Malley Programs representing the Gila River Tribe, Globe School District, Indian Development District of Arizona/Phoenix, Paiute Tribe/Utah, and the Tohono O'odham Tribe, White Mountain Apache Education Department; JTPA programs from the Gila River and White Mountain Tribes. In addition, AG Communication Systems Corp., a private corporation funded ten students to attend the Academy.

Philosophy of Nizhoni Academy

The task of providing quality services is a reflection of the philosophical foundation of our program. The Nizhoni Academy, as part of Educational Support Programs (ESP), operates within the same general philosophy that the entire department supports. The philosophy focused on five aspects of the learning: metacognition, concentrated learning, cooperative learning, a process approach and critical thinking skills.

Metacognition: Metacognition is used to develop self-awareness of how the student learns and organizes new material. Each student needs to understand his/her strengths and weaknesses; what methods make learning easy; which strategies work well and what limitations are present. Self-awareness allowed students to use their assets and to make changes that allow them to be a successful learner and contributor to society. Metacognition was examined in terms of learning study skills, and learning styles, as well as a useful approach in helping students make future

plans. This idea was extended to other non-cognitive factors that contribute to educational success.

Concentrated Learning: Once material is learned in-depth or when a high level of competency is obtained, educational research indicates that the material is remembered equally well by good and poor learners. It may require several exposures and continued study for poor learners to achieve the same level of knowledge that good learners quickly gain, but once a complete understanding is achieved, all students will retain the material and be able to apply it. A variety of presentations techniques and academic exercises is used to obtain mastery of new material.

Cooperative Learning: Cooperative learning utilizes a group structure in which students contribute collaboratively to academic tasks and assist fellow members in reaching academic objectives. The cultural process used for learning Native American traditions and religious beliefs indicated that Native American students learn in a time frame that allows individualized progress, fosters cooperation and incorporates frequent exposure. In-depth learning experiences are consistent with the cultural learning that students have experienced during their youth.

Process Approach: The process approach focused on the instruction of the different stages of particular cognitive tasks. It breaks a complex activity, such as writing, program-solving or decision-making, into pre-activities (motivation, preparation, assessment of tasks); during activities (writing a rough draft, solving a problem,); and post-activities (follow-up, summarization, or evaluation with alternatives). This "before-during-after" approach is applied to all academic tasks (studying, writing, reading, problem-solving, critical thinking) or in examining life experiences and understanding institutional expectations.

Critical Thinking: Critical thinking involved three primary elements: 1) the ability to recognize the central concern of an issue, question or problem and to look at that particular issue, question or problem from a variety of different perspectives; 2) the ability to apply different problem-solving strategies to a particular issue, question, or problem; and 3) a definite personal mental or psychological attitude that results in an individualist actively questioning what s/he reads, what s/he hears, and what goes on around him/her in the world. Development of critical thinking skills contributed to the student's greater understanding of academic material, enhances their student survival strategies, and helped him/her to better integrate general life experiences.

Objective 1: Academic Development: Provide an early introduction to university academic life while providing a support

system to guide and motivate participants through the demanding experience in their preparation for post-secondary education.

a. **Foundation Courses:** A total of 160 hours of instruction was provided for 1.0 Carnegie unit of credit in the foundation courses of English, Mathematics and Career Development. All the instructors are certified in the foundations courses they teach. The syllabi, and daily lesson plans were designed by the instructors after they participated in three training/curriculum development sessions.

The curriculum focused on: 1) in-depth, concentrated study in selected skill areas; 2) integration of computer work, study skills and reading into the curriculum on a daily basis, and: 3) student-centered classroom activities. All coursework was supported by an instructional lab, where students participated in small group sessions to work out individual difficulties and reinforce learning goals.

Each student earned a final grade in each subject area. The composition course represents 42% of the grade, while mathematics and career development had a weight of 34% and 24% respectively. All the instructors were certified secondary English or mathematics teachers, had taught at either reservation schools or schools with high minority enrollments.

Grading included academic achievement, motivation, effort, and class participation. This served not only as a progress check, but also as a counseling tool to encourage students to perform academically.

-English: The emphasis of composition is to master writing skills necessary for success at the freshman college level. This course utilized a "thematic" approach to instruction. Since the explicit goal is to develop student skills in writing a three point, five paragraph essay. Instructors used readings, films, music, and discussions as motivators for these essays. Students also developed their reading, writing and grammar usage skills. One skill area identified as a weakness was the ability to summarize and therefore, thus effort was focused on this. Students also wrote in journals on a daily basis. During the course of the five-week period, there was a total of 68 hours of classroom contact with the students which includes 48 hours of classroom activity and 20 hours in the instructional lab.

-Mathematics: The goal of the mathematics course is for students to learn and integrate problem solving skills.

This was accomplished in two ways. First, students worked on strategies and approaches to problem solving through exercises and creative activities. Second, classroom content covered numerous stylized word problems. Since many of the participants are second language English speakers, the design of the course forced them to deal with various language structures for presenting mathematical concepts and to write about mathematics, frequently utilizing personal journals.

There were three levels of mathematics: Fundamental Math, Introductory Algebra and Advanced Algebra which was split to allow high-achieving students to explore pre-calculus and calculus concepts. The focus of each course was problem solving and reasoning skills necessary for mathematical thinking and understanding. During the five week period, the emphasis was on the analysis and application of strategies to solve a variety of situation/word problems. Study, reading, and writing skills related to math was also addressed. Emphasis was also placed on test taking since many mathematic students experienced test anxiety. A total of 36 hours of instruction was provided, in addition to 20 hours of instructional lab.

-**Career Development**: This course guided students through a decision-making process directed toward selecting a career area. Students learned the steps involved in making an important decision, including the gathering of information from a variety of sources and a comparing this data with personal skills and interests. The course began with values, decision-making and goal setting exercises, plus the students also completed a Vocational Interest Experience and Skills Assessment (VIESA) to identify career interest areas, and research occupational information on the Guidance Information System. This allowed students to develop individual personal, educational and career goals. Time management was incorporated into the course material, as well as writing, computer assignments and the reading of various types of career/job listing books and research. To enhance the education and career goals, guest speakers from the public and private sector were invited to make presentations in the classrooms. In addition, a Career and College Fair was organized to provide the students an opportunity to speak with representatives from various colleges, and universities. The total classroom contact time for this course was 24 hours during the five-week period.

b. **Integration of Skills**: Curriculum for student must provide practical opportunities similar to their learning process. Abundant modeling and practice of academic study skills was utilized in real academic settings in order to demonstrate their effectiveness and foster their

integration with the student's other skills. In applying this approach, study skills cannot be taught separately, and therefore was integrated into each subject content area. In a similar fashion, reading skills was specific to each course, demonstrating skills pertinent to either objective or subjective courses. Writing skills was also an integral component of study skills.

Reading, study skills and computer literacy were incorporated into the daily activities of each course. A full array of skills were addressed and integrated into each course which included time management, test preparation/test taking, summarization, note taking, memory/learning and critical thinking were also addressed. This approach fits our philosophy of a holistic program where learning experiences are integrated, all through practice and actual application of new skills. The department's reading specialist also worked with individual students with extreme difficulties who were identified and referred by instructors.

c. **Integration of Content Areas**: A fully integrated curriculum, where each subject is seen as interacting with others, is one of the methods currently promoted in educational restructuring. Therefore, exploration of ways in which the areas of English, mathematics, and career development has to be intertwined and linked together into a holistic approach and activities has serious consideration in this program. Using the thematic approach already in progress has begun this development. For example, a theme such as "The Environment" was explored in the English component by readings and writings of the environment as it pertains to our world. In the mathematical component, problem-solving skills in calculating and diagramming of global warming, stock and grazing per acre, irrigation systems, with creative problem solving skills to arrive at possible solutions, and in the career development component by exploring hydrologist, conservation officer, chemist, agricultural services, biologist are career possibilities to the environment.

d. **Seminars**: Participants attended 20 hours of seminars which included a series of sessions on computer literacy, ACT preparation, time management, self-esteem, racism, urban survival skills and preparation for high school graduation. Prospective seniors spent most of their seminar time in ACT preparation workshops which exposed students to test-taking strategies, test format and academic review. The preparation workshops included a sample test, techniques for stress management, review of information, and strategies for solving problems. The ACT preparation and testing is included in the Academy in order to encourage early application for college admission and to

focus student attention on the college application process. For the sophomore and freshman students some work with the P+ACT served as an introduction to national standardized college admissions test-taking.

e. **Instructional Lab**: These labs were coordinated with the instructors and assignments offered in the mathematics and English courses. Students were assigned to a group of 5 or 6 participants and worked both individually and in small groups to solidify course material. In this way, personal attention was provided to assist each student academically for 38 hours. The lab consists of daily two hour long study sessions. Tutors, who have attended class with the students and knew the instructors' purpose and methodology, supported students; academic work by means of guided questioning, modeling and detailed feedback. Tutors are trained in how to incorporate study skills and learning strategies, into the tutoring to support the reading and study skills work being taught in class. Tutoring is conducted in group settings where the tutor can gain, through individualized and group work, continued exposure to the students' learning process and knowledge of the students' strengths and weaknesses. Such group work has built a peer support network for students.

f. **Student Assessment**: Special arrangements were made to provide a skills assessment for each student. Initial academic readiness was evaluated by administering entrance exams and course pre-tests. Each participant took the regular college mathematics placement test. The test evaluated the level of competency in arithmetic, algebra and high levels of mathematics. A total of 40 questions ranging from arithmetic to trigonometry and calculus were on the placement exam. Weekly grades for all three classes are discussed with each student, as well as effort, attitude and academic strengths. Students were offered the opportunity to provide regular feedback to the program through essays, comments to counselors, and structured evaluation sessions.

Objective 2: **Computer Literacy**: Computer literacy workshops and course assignments utilizing computers were designed to increase the participant's working knowledge of computers, including hardware and software functions, while teaching an understanding of the role computers play in modern society. The university constructed a computer lab/classroom adjacent to the Learning Assistance Center. This computer classroom houses 25 MacIntosh personal computers and five printers. Class sizes were 25 students

with each section meeting one and one-half hour during the first week of the Academy for an introductory computer workshop. In addition, extra hours were established over meal hours, in the evenings, and on Friday, Saturday, and Sunday afternoons for free use by the students to complete compositions and career development assignments. Computer hours were also scheduled when instructors could bring their classes into the lab.

Objective 3: Curricular Model: All coursework was based on the development of an in-depth curricular model, resulting from both research in cognitive retention and multicultural education, and NAU's previous experience in educating Native American secondary students. Thus, a theoretical base was mixed with staff knowledge and experience. This approach focused on selected, important academic skills, which are studied and practiced in a variety of ways until students obtain mastery of the identified skill. The approach also incorporated a holistic emphasis on the relationship between academic progress and non-cognitive attributes, such as self-esteem, values, goals, and support systems.

Objective 4: Extracurricular Activities: Structured activities were scheduled to promote constructive interaction between peers, instructors, and other staff members. Some of these were connected to academic assignments. Such activities include cultural and recreational activities to introduce participants to all facets of college life, including those requiring the development of social skills. These activities offered new experiences for many participants.

Recruitment and Selection

Nizhoni Academy is designed for students who are high school freshman, sophomores, and juniors in good academic standing. The student's high school curriculum must reflect a college bound

program. In addition, it was preferred that students be in the top third of their class.

The recruitment process involved: 1) dissemination of applications to all high schools and all tribal officials in Arizona, New Mexico, Utah and California, 2) dissemination of news release of the Nizhoni Academy to local and state newspapers, 3) personal referrals from previous student participants and 4) personal contact by Academy director.

Application

Nizhoni Academy received a total of 1,154 applications and transcripts, 1,608 inquires, and a total of 498 students were accepted into the Academy for the years 1989,90 and 91 (see table 3).

Table 3
Nizhoni Academy Student Enrollment

Year	# Applications Received	# Inquires Received	# Applicants Received
1989	184	351	164
1990	457	457	169
1991	513	800	165
TOTAL	1,154	1,608	498

The application process involved potential participants to submit:

a) Nizhoni Application,
b) High school transcript indicating rank and class standing,
c) Letter of recommendation from school official, and
d) Certificate of Indian Blood (only required for matching funds from the Navajo and Hopi tribes)

Selection

Only those applications that submitted all required documents were considered for participation. Selection of participants were made on the basis of: 1) the application, 2) student essay on

career goals and determination in continuing on in higher education, 3) academic standing/transcript and 4) letter of recommendation by school administration.

Notification of selection occurred at the end of May for each year of the program. Upon selection, the applicants were required to complete a registration packet indicating to the Academy of their acceptance to our summer program. Students were apprized of the high standards, student responsibilities and expectation set forth by the program. In addition, students were made aware of what they could expect out of the program, and the camp's responsibilities to the student.

Students were recruited from high schools from the four corner states of Arizona, Colorado, New Mexico, and Utah with a special emphasis placed on the seven target high schools involved in the partnership program (Cuba, Tohatchi, Chinle, Red Mesa, Magdalena, Hopi and Navajo Pine). Distribution of the program brochure/poster was mailed to southwest high schools and the 19 tribes within Arizona. In addition, NAU recruiters/representatives distributed applications at career and college fairs held at various high schools.

A large majority of the participants were of the Navajo Nation, with the Acoma, Ft. Mohave, Gila River Pima, Hualapai, Hopi, Jemez Pueblo, Jicarillo Apache, Kiowa, Laguna Pueblo, Maricopa, Paiute, Potawatomi, San Carlos Apache, San Felipe, Santa Domingo,Tohono O'odham, White Mountain Apache, Yavapai Apache, and Zuni Tribes were represented. A diversified number of tribal entities and ethnic groups have made the Nizhoni Academy an experience students will remember as a stepping stone to their future aspirations.

Profile of Participants

The Academy also recruited and accepted 17 freshman, 276 sophomores, and 205 junior high school students (see table 4).

Table 4
Nizhoni Academy - Profile of Participants

Year	# Freshman	#Sophomores	# Juniors	Total
1989	0	94	70	164
1990	5	93	71	169
1991	14	87	64	165
TOTAL	19	274	205	498

Structure of the Summer Program (Nizhoni Academy)

The overall summer program was managed by the Director of Educational Support Programs (Ray Rodriquez). The Assistant Director (Connie Albert) coordinated the three components of the Academy. These components - academic, residential and administration, were organized to accomplish the objectives of the Nizhoni Academy. The staff conducted the preliminary planning, organized daily program activities and finalized projects for the summer program. These included the recruitment, selection and training of academic, residential, and administrative personnel; scheduling classrooms for the courses, workshops and seminars; assignment of rooms in the residence halls, development of instructor, counselor, student handbooks; arranging meal plans, health/emergency care, and transportation.

PROJECT RESULTS

The program's impact can best be seen through an analysis of the student's performance in the Nizhoni foundation courses, composition (English) and mathematics. In both classes, participants took pretests to determine their skills at the outset of the program. Post tests were given upon the conclusion of the program to determine improvement. (The pretest and post test scores can be found in the program appendices).

The composition test used an essay format, scored on a scale of 0 to 4. Post test were compared to the pretest to determine improvement in this academic area.

The mathematics testing featured 10 questions that ranged from the arithmetic level to algebra story problems. Data for the pretest and posttest is provided in the appendices.

Strengths and Weaknesses

Information on program strengths and weaknesses was compiled after study of evaluations completed by Nizhoni Academy staff, instructors, tutors, counselors and students.

Program Strengths:

A. Academic Year

1) The partnerships between NAU, and the seven school sites was an important part of this program because it established a relationship between a university of higher education, in which services were provided for those students in these school. This relationship is still in existence after the project has come to an end.

2) We found that the administrators and teachers of the schools were very cooperative and provided space, equipment, supplies, and supported the project.

3) We found that the teacher training sessions were conducted on schedule, all topics were covered at each session, and the parents and teachers were very cooperative.

4) Among the site teachers, we found that there was a strong desire from these teachers to become part of this project, and a continuity was established for every year of the program. I hardly found ourselves having to recruit new teachers for the program.

B. Summer Component (Nizhoni Academy)

1) The computer lab was rated 'excellent'. Students enjoyed working with the MacIntosh computers. Lab aides for the

lab were also rated outstanding for their assistance to students during lab hours.

2) The instructors were rated outstanding. Students indicated instructors took the time before and after class to assist the students with questions and/or problems.

3) The career fair/speakers forum was deemed successful. Plans are being made to invite larger eastern schools/universities to the events.

4) More time was given to allow sufficient computer time for students. Additional hours were added during lunch and dinner time and hours on Friday, Saturday and Sundays.

5) The tutoring component and facilities were rated good. Students felt they received the individualized attention needed to assist them understand the homework assignment. Facilities were ideal with desks that were excellent for cooperative learning and small group work.

6) Students indicated that pre-assigned roommates was a good idea, as long as the roommate was of the same class standing. They felt this gave them some common ground to begin the relationship.

7) The Career Resource room was indicated as being helpful to students in searching out their career goals, strengths and weaknesses.

8) Intramurals was rated 'excellent'. This was very popular among the students. It was indicated that the Activity Center provided the best facility for physical activity, space, and the variety of equipment available.

Overall, the evaluations indicated the Academy allowed the students the opportunity to meet new people, learn responsibility and contributed to the student's motivation to continue on with some type of post-secondary education.

Program Weaknesses:

A. Academic Year

1) We found that there was a high turnover rate among the principals at some of the schools. For example, when the program was first initiated in 1988, and concluded in 1991, there had been four principals employed by one single school.

2) Participating teachers felt that there was a great demand from the project regarding paperwork and bookkeeping required of each teacher. They found that they were overloaded with this task.

B. Summer Component (Nizhoni Academy)

1) Ventilation in the computer lab is very poor. Computers were continually down due to overusage.

2) Study hall was rated 'good', however more planning is needed in this area. Students complained it became too loud to concentrate.

3) Lack of free time was indicated by the students. Students felt the daily schedule was challenging, however, they indicated there was no time for themselves. Weekends were considered boring, especially on Sundays.

4) The closed campus rule caused some conflict with students, and was indicated by the students as making them feel like they were not trusted.

5) Lines at Central dining hall became too long. Students were tardy or considered absent, thus causing confusion for the tutors and instructors.

6) Computer lab hours need to be increased further. Due to the limited number of computers, attempting to fit 240 students into the lab was very difficult. With the cooperation of the Arts and Design, we were given permission to use their lab twice. Serious consideration must be given regarding this issue.

Recommendations

A. Academic Year

- For each school site, there should be at least one contact person (part-time coordinator) who will help in facilitating the program activities that pertain to the objectives and goals of the project.
- Teacher training sessions should be conducted either at the beginning of the semester for each school year (the first week for all reporting teachers), and follow-up sessions should be conducted throughout the school year.

- More computer training sessions should be conducted not only for students, but also for teachers. Teachers find the lab very helpful in becoming computer literate, but also in assisting them in teaching the content of the subject matter.

- The PACT workshops should be conducted each year at the beginning of the school year for each school for those students (seniors) who are anticipating on applying to a college after graduation from high school.

B. Summer Component (Nizhoni Academy)

- Move classes forward one-half hour, so that classes begin at 8:00 a.m.

- Recruit students who are seriously interested in an academic program. Consider interviewing students prior to their selection.

- Consider looking at closed campus regulations. Consider open campus with parent permission.

- Recommend increasing computer lab hours to fit into students schedule.

- Consider opening cafeteria earlier, ie. 6:30 am due to the large number of camp participants.

- Better communication and planning with "Talk Shop". Begin plans and organization with Educational Psychology department earlier.

- Develop a daily bulletin, similar to high school to keep staff appraised of daily events.

Goals Accomplished:

1) Enhanced the educational experience for all students in the areas of drop-out prevention, career awareness, personal development, teacher training, parent involvement, and provided an academic experience for those students who are to attend college.

2) Recruited at several Indian schools, such as Santa Fe, N.M. and Riverside, California to provide further outreach efforts and service students who are academically inclined.

3) Increased public relations with tribal agencies in Arizona, New Mexico, Utah and California. Increased student representation of tribes in the Academy; 16 to 21 in 1991.

4) Increased high school representation in 1991, 45 schools to 68. In addition, state representation increased from 5 to 7.

5) Increased ethnic representation to provide a more realistic setting of the college environment.

Research, Scholarly Presentations and Publications

The School, College & University Partnerships program was conceived as a demonstration project for its three years of its existence. During this project period, there were numerous presentations conducted by SCUP staff personnel at professional conferences (National, State & Local), publications relating to program accomplishments, manuscripts, staff, teacher and student handbooks, curriculum materials, newsletters, and continued research being conducted for both the academic year and the summer component "Nizhoni Academy" (see table 5).

Table 5. Scholarly Presentations/Papers

NAME OF CONFERENCE	PRESENTER(S)/ POSITION	NAME OF PRESENTATION/ PAPER
The 4TH Annual National Conference on Racial & Ethnic Relations in American Higher Education	Dr. Willard Gilbert Project Director	"Empowering the Native American Student: A Framework for Academic Success"
Eighth Annual AZ TESOL Conference	Dr. Willard Gilbert Project Director	"Empowering the Native American Student - What Works"
Native American for Community Action	Dr. Willard Gilbert Project Director	"Issues of Native American Education"
22ND Annual Conference National Indian Education Association (NIEA)	Dr. Willard Gilbert Project Director	"Empowering the American Indian Student"
American Council on Rural Special Education (ACRES) & the National Rural & Small Schools Consortium	Dr. Willard Gilbert Project Director	"University Partnership with Tribal Public Schools - What Works"
Arizona State Advisory Council on Education	Dr. Willard Gilbert Project Director	"Developing Beneficial Partnerships"
The United States Department of Education, Washington, D.C. Rural and Small Schools Consortium	Dr. Willard Gilbert Project Director	"School, College and University Partnerships"
Arizona College Reading and Learning Association (AZ CRLA), the Arizona Association for Development Education (ADADE)	Dr. Willard Gilbert Project Director	"Partnership: Creating Innovative Classes for Native Americans"
The 4TH Annual Navajo Studies Conference	Dr. Willard Gilbert Project Director	"Programs & Policies to Increase Navajo Access to Teacher Education"
1989 Annual Conference of the American Indian Higher Education Consortium Conference.,	Dr. Willard Gilbert Project Director	"University - School Partnership Program"
State Advisory Council for the State of ARIZONA	Dr. Willard Gilbert Project Director	"School, College & University Partnership with NAU, the Navajo and Hopi Tribes"
Indian Nations At Risk Task Force in Conjunction with the National Advisory Council on Indian Educ.	Dr. Willard Gilbert Project Director	""Empowering the American Indian Student"
Task Force 2000 - Education Summit Workshop - The Navajo Nation	Dr. Willard Gilbert Project Director	"NAU Partnership Program - Providing Educational Opportunities for those Educationally Disadvantage Students"
Native American Regional Center for Gifted Education	David Basham Asst. Director	"Technological Academics in Distance Learning"
National Educational Computing Conference	David Basham Asst. Director	"The Impact of the Educational Native American Network on Rural Schools"

CONCLUSION

This project has attempted to produce an objective, precise detailed account of the School, College and University Partnerships program conducted in seven target secondary schools, the campus of Northern Arizona University, and the Department of Education, the Navajo Nation, Window Rock, Arizona. The collaboration of IHE and LEA's has been very successful, and many positive aspects of the program contributed to the success of this project. It has been demonstrated conclusively that: